



10/702414

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Cogf

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February 22, 2010

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Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Re: *Request for Certificate of Correction for*  
*United States Patent No. 7,300,547*  
*Issued November 27, 2007*  
*Phuong V. Luu et al.*  
*Entitled Absorbent Sheet Exhibiting*  
*Resistance to Moisture*  
*Our Reference No. 12376 (GP-01-24)*

Sir:

Attached hereto is a proposed *Certificate of Correction* in the above-noted patent, together with the attached section of the patent wherein the error is highlighted thereon.

Please issue a *Certificate of Correction* pursuant to 35 USC §254 to correct this mistake which was due to a typographical error and is believed appropriate subject matter for a *Certificate of Correction*.

Please charge the fee for the Certificate of Correction, i.e., \$100.00, to Deposit Account No. 50-0935. If additional fees are deemed necessary, please consider this a *Petition* therefor and charge any fees to Deposit Account No. 50-0935.

Respectfully submitted,

Michael W. Ferrell  
Reg. No. 31,158

/crm  
Attachemnts

**Certificate**  
FEB 26 2010  
**of Correction**

**CERTIFICATE OF MAILING BY FIRST CLASS MAIL (37 CFR 1.8)**Applicant(s): **Phuong V. Luu et al.**

Docket No.

**12376 (GP-01-24)**

Application No.

**7,300,547**

Filing Date

**November 27, 2007**

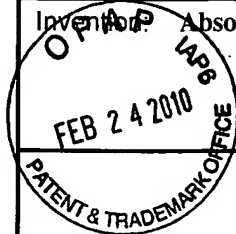
Examiner

**Eric J. Hug**

Customer No.

**40256**

Group Art Unit

**1731**Inventor: **Absorbent Sheet Exhibiting Resistance to Moisture Penetration**I hereby certify that this Certificate of Correction, copy of face of issued patent & return postcard

(Identify type of correspondence)

is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)] on

February 22, 2010

(Date)

Carol R. Maddaloni

(Typed or Printed Name of Person Mailing Correspondence)

A handwritten signature in cursive script that reads "Carol R. Maddaloni".

(Signature of Person Mailing Correspondence)

**Note: Each paper must have its own certificate of mailing.**

# UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

Page 1 of 1

PATENT NO. : 7,300,547  
APPLICATION NO. : 10/702,414  
ISSUE DATE : November 27, 2007  
INVENTOR(S) : Phuong V. Luu et al

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Change the Assignee's name on the face of the patent at (73) from "Georgia-Pacific Consumer Products LLC" to -- Georgia-Pacific Consumer Products LP--.

MAILING ADDRESS OF SENDER (Please do not use customer number below):

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PATENT NO. 7,300,547

No. of additional copies

→ 0



US007300547B2

(12) **United States Patent**  
Luu et al.

(10) **Patent No.:** US 7,300,547 B2  
(45) **Date of Patent:** Nov. 27, 2007

(54) **ABSORBENT SHEET EXHIBITING  
RESISTANCE TO MOISTURE  
PENETRATION**

# FOREIGN PATENT DOCUMENTS

EP 1 029 977 \* 8/2000

(75) **Inventors:** **Phuong V. Luu**, Appleton, WI (US);  
**Steven L. Edwards**, Fremont, WI (US);  
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(Continued)

# OTHER PUBLICATIONS

Fundamentals of Barrier Properties, Stannett, V.T. et al., Department  
of Chemical Engineering, North Carolina State University, Raleigh,  
North Carolina. (undated); and Smart Materials for Liquid Control,  
Non-Wovens World, Oct.-Nov. 1999, Dyrnrose-Peterson, pp. 95-99.

(73) **Assignee:** **Georgia-Pacific Consumer Products  
LLC**, Atlanta, GA (US)

(\*) **Notice:** Subject to any disclaimer, the term of this  
patent is extended or adjusted under 35  
U.S.C. 154(b) by 449 days.

*Primary Examiner*—Eric Hug

(74) *Attorney, Agent, or Firm*—Michael W. Ferrell

(21) **Appl. No.:** 10/702,414

(57) **ABSTRACT**

(22) **Filed:** Nov. 6, 2003

(65) **Prior Publication Data**

US 2004/0250969 A1 Dec. 16, 2004

# Related U.S. Application Data

(60) **Provisional application No.** 60/424,434, filed on Nov.  
7, 2002.

(51) **Int. Cl.**  
**D21H 19/18** (2006.01)  
**D21H 27/30** (2006.01)  
**D21H 27/40** (2006.01)

(52) **U.S. Cl.** ..... 162/172; 162/112; 162/123;  
162/136; 162/184

(58) **Field of Classification Search** ..... 162/109–117,  
162/123–125, 127, 132, 135–137, 172, 173,  
162/179, 180, 183, 184; 428/152–154  
See application file for complete search history.

(56) **References Cited**

# U.S. PATENT DOCUMENTS

1,682,346 A 8/1928 Lorenz

(Continued)

An absorbent paper sheet is treated with an aqueous wax  
dispersion such that the sheet includes a fused wax and  
emulsifier residue in an amount of from about 1 to about 20  
weight percent of the sheet based on the combined weight of  
the fiber, wax residue and an emulsifier residue in the sheet.  
The fused wax emulsion operates to make at least one  
surface of the sheet laterally hydrophobic, exhibiting a  
moisture penetration delay of at least about 2 seconds and  
less than about 40 seconds as well as a typical contact angle  
with water at one minute of at least about 50 degrees. There  
is thus provided absorbent products which exhibit both  
absorbency and resistance to moisture penetration. The  
treated sheet further exhibits microbial barrier properties,  
impeding transfer of bacteria, for example, through the  
sheet. There are produced tissue products which resist  
moisture penetration from propelled liquids as well as  
sequester sorbed liquids in the interior of the tissue.

**20 Claims, 36 Drawing Sheets**  
(6 of 36 Drawing Sheet(s) Filed in Color)

